

REMARKS

This is in response to the Official Action currently outstanding with respect to the above-identified application (which Official Action the Examiner has designated to be FINAL).

Claims 1-4 and 6-15 were present in this application as of the time of the issuance of the currently outstanding Official Action (which Official Action the Examiner has designated to be FINAL). By the foregoing Amendment After Final Rejection Under 37 CFR 1.116, Applicants propose that Claims 1, 3, 4 and 6-17 be amended so as to more clearly and definitely set forth the invention in such a manner that the distinctions between it and the cited art are apparent. These amendments to the claims of this application, if entered, are believed to place this application in condition for allowance, or at least in better form for Appeal as required by 37 CFR 1.116. Also, a "**VERSION SHOWING CHANGES MADE TO THE CLAIMS**" is attached as required by the Rules. Accordingly, in the event that the foregoing Amendment is entered, Claims 1-4 and 6-17 as amended above will remain under active prosecution in this case.

More specifically, it is noted that in the currently outstanding Official Action, the Examiner has:

1. Acknowledged Applicants' claim for foreign priority under 35 USC 119(a)-(d), and indicated that the required certified copies of the priority document have been received by the United States Patent and Trademark Office.

2. Indicated that Applicants' previous arguments have been considered, but are not deemed to be persuasive

3. Rejected Claim 17 under 35 USC 112, second paragraph, on the grounds that the phrase "the output request" lacks sufficient antecedent basis.

4. Rejected Claims 1-4, 6-10, 12 and 14-17 under 35 USC 103(a) as being unpatentable over the Szuki et al reference (U.S. Patent No. 5,923,013) in view of the Hamanaka et al reference (U.S. Patent No. 5,801,837).

5. Rejected Claim 11 as being unpatentable under 35 USC 103(a) over the Suzuki et al reference in view the Hamanaka et al reference, and further in view of the Morikawa reference (U.S. Patent No. 5,960,247).

6. Rejected Claim 13 as being unpatentable under 35 USC 103(a) over the Suzuki et al reference in view the Hamanaka et al reference, and further in view of the Kusumoto reference (U.S. Patent No. 6,088,135).

Further comment in these Remarks regarding item 1 above is not considered to be necessary.

As was the case in Applicants' response to the previous Official Action in this case, the dependent claims of this application, namely Claims 2-4, 6-13 and 15-17, are believed to be patentable at least by virtue of their respective dependency upon allowable independent claims 1 or 14. Accordingly, additional detailed discussion of the patentability of these dependent claims is not believed to be required in these Remarks.

With respect to the Examiner's outstanding rejection of Claim 17 under 35 USC 112, second paragraph, on the basis of an alleged lack of sufficient antecedent basis for a term used in that claim, Applicants by the foregoing Amendment have amended Claim 17 in a manner believed to remove the basis of the Examiner's rejection. Specifically, the Examiner's basis of rejection related to the use of the phrase "the output request". Applicants now propose that the word "the" be deleted from this phrase in Claim 17 so as to remove any implication that the output request being referred to is in any way to be understood as being an output request previously identified and/or defined in the claims of this application. It is believed that this amendment removes the basis for the Examiner's rejection of Claim 17 under 35 USC 112, second paragraph. A decision so holding in response to this communication is respectfully requested.

With respect to independent Claims 1 and 14 and the Examiner's substantive rejections of this application in the currently outstanding FINAL Official Action, Applicants respectfully submit that the Susuki et al reference taken either alone, or in combination with the Hamanaka et al reference, fails to disclose, teach or suggest the following features of the present invention as now proposed to be specifically claimed:

(i) input completion information showing completion of an input of **each** input image data, and input request information showing a request for transmitting **each** input image data from the image processing means are managed in connection with **each** corresponding input image data stored in the image data storage means (as specifically disclosed in the present specification at page 40, lines 18-20 and at page 42, lines 12-25 and now specifically claimed); and

(ii) output completion information showing completion of an output of **each** processed input image data which was processed by the image processing means, and output request information showing a request for outputting **each** processed input image data from the image output means are managed in connection with **each** corresponding input image data stored in the image data storing means (as specifically disclosed in the present specification at Page 40, lines 18-20, page 45, lines 2-7 and now specifically claimed).

More particularly, it will be understood that with the above feature (i), if the input of images is interrupted by trouble, for example, it is possible to perform the instructed image processing with respect to image data of images which previous to the trouble had been completely inputted; to recognize which image data has not been inputted; and to give an instruction to restart the input and image processing of remaining images. Hence, in the present invention, by managing input request information together with input completion information, the claimed device provides more accurate control measure capabilities than those disclosed, taught or suggested by the cited prior art (see, page 7, line 24 to page 8, line 7 of the present specification).

Also, it will be understood that with the above feature (ii), even in the case of trouble such as a jam in the image output section, a recovery in the output process can be made accurately while at the same time recalling how far the image processing has advanced. Hence, in the present invention, by managing output request information together with output completion information, the claimed device provides more accurate control measure capabilities than those disclosed, taught or suggested by the cited prior art (see, page 5, line 19 to page 6, line 8 of the present specification).

Applicants acknowledge that a similar line of argument was presented in the previous Amendment in this application, and that the Examiner rejected that argument in the presently outstanding FINAL Official Action. It is believed, however, that the currently outstanding rejection of the claims of the present application is the result of Applicants' prior failure to phrase the claims of this application with sufficient and necessary particularity. It is unclear whether this is the result of a problem in the translation of this case from the original Japanese into English, or the result of an assumption on the part of the Applicants regarding what would be clear to a person of ordinary skill in the art from the originally filed specification and claims. In particular, the present specification at page 40, lines 18-20, clearly indicates that each inputted image data is to be separately managed. In addition, originally filed Claim 8, subpart 5, and Claim 9, subpart 2, indicate specifically that the present invention is concerned with individual images as opposed to the content of each page of images being processed as a unit. Further, other portions of the originally filed claims clearly indicate that the Applicants are concerned with the input, storage, processing and output of "each input image data".

In view of the foregoing, Applicants now are proposing amendments to the claims of the present application that distinctly clarify the scope of the invention being claimed. No new matter is believed to be introduced into this application by the amendments to the claims proposed above. Similarly, it is believed that in view of the wording of the original claims (particularly, Claims 8 and 9), no new issue requiring further consideration and/or search is raised by the foregoing proposed Amendment.

Consequently, it is respectfully submitted that upon reconsideration the Examiner will agree with the Applicants that the Claims of this application as they are proposed to be amended hereinabove are clearly not unpatentable over the cited references under the terms of 35 USC 103(a). Both of the cited references are concerned with the processing of input data on a complete page basis, not on the basis of input individual images.

Thus it will be seen that the Hamanaka et al reference speaks in terms of **page-by-page input completion** at column 9, lines 23-45, referred to by the Examiner. The importance of this in the Hamanaka et al reference is two-fold. Hamanaka et al. stores input data in a compressed page-by-page format, and Hamanaka et al. provides for the verification of the correctness of input of data from each page by printing out a copy of each page "serially" upon the completion of its input. There is no disclosure or suggestion in the Hamanaka et al disclosure of which Applicants are aware that contemplates or would otherwise lead one skilled in the art to create a system such as the presently claimed invention wherein data input can be resumed from the point at which it left off (i.e., with the next succeeding incompletely inputted image on any given page) after encountering trouble such as a jam.

Similarly, the Suzuki et al. reference is quite clear to the effect that it deals with a system for managing print jobs on a job or a page basis. Further, a close reading of the Suzuki et al reference leads to the definite conclusion that when Suzuki et al speaks in terms of job basis printing, the reference is intended to be to the printing of multiple pages, not to the handling of individual images among many images on any given page. Therefore, there also is no disclosure or suggestion in the Suzuki et al disclosure of which Applicants are aware that contemplates or would otherwise lead one skilled in the art to create a system such as the presently claimed invention wherein data input can be resumed from the point at which it left off (i.e., with the next succeeding incompletely inputted image on any given page) after encountering trouble such as a jam.

Accordingly, it is respectfully submitted that the present invention as now proposed to be claimed is patentably distinct from the cited references, whether those references are considered alone or in combination with one another. A decision so holding in response to this communication is respectfully requested.

For each and all of the foregoing reasons, it is believed that the claims of this application as they will stand upon the entry of the foregoing Amendment are in condition for allowance. Reconsideration of this application and the allowance of Claims 1-4 and 6-17 in response to this communication, therefore, are respectfully requested.

Applicants believe that additional fees are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. **04-1105**, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,

Date: October 23, 2001

By: David A. Tucker
David A. Tucker
Reg. No. 27,840
Attorney for Applicant(s)

Dike, Bronstein, Roberts & Cushman
Intellectual Property Practice Group
EDWARDS & ANGELL, LLP
P.O. Box 9169
101 Federal Street
Boston, MA 02109
(617) 523-3400
177460

VERSION SHOWING CHANGES MADE TO AMENDED CLAIMS

Additions shown underlined; Deletions shown in brackets.

Please amend Claims 1, 3, 4 and 6-17 as follows:

1. (Thrice Amended) An image processing device which comprises image data input means for inputting image data, image data storage means for storing [the] input image data received from said image data input means, image data confirmation means for confirming characteristics of [the] each input image data, management table means for managing the characteristics of each input image data confirmed by said image data confirmation means as management information of said each input image data [,] with reference to the corresponding each input image data stored in said image data storage means, and image processing means for performing image processing with respect to said each input image data,

wherein:

said management table means manages input request information indicative of a request for transmitting [the] each processed input image data from said image processing means, and input completion information indicative of the completion of an input of [the] said each input image data responsive to said request [,] in connection with the corresponding each input image data stored in said image data storage means.

3. (Amended) The image processing device as set forth in claim 2,
wherein said management table means further includes a mode
management section for managing a processing mode set by said mode setting means
as management information of each input image data with respect to the
corresponding each input image data stored in said data storage means.

4. (Twice Amended) The image processing device as set forth in claim 3, wherein
said image processing means further includes an image processing management
section for performing [the] image processing with respect to said each input image
data based on said management information managed by said management table
means.

6. (Twice Amended) The image processing device as set forth in claim 4, further
comprising image output means for outputting [the] said each input image data
processed by said image processing means,

wherein said management table means further includes a management output
section for outputting [, the] each processed input image data from said image output
means [,] according to the management information.

7. (Amended) The image processing device as set forth in claim 6,
wherein said management table means produces at least one table
selected from the group consisting of:
an image input table for managing information relating to each input
image data and processing conditions for each input image data;
an image process table for managing [, for each image data] the contents
of the image processing to be performed with respect to [the] each input image data
and information relating to [the] each input image data that has undergone image
processing; and
an image output table for managing information relating to the output of
each input image data that has undergone image processing.

8. (Amended) The image processing device as set forth in claim 7,
wherein said image input table includes at least one item of information
selected from the group consisting of:
document ID information indicating an identification number for
identifying each page [of] associated with each input[ted] image data;
document side information indicating whether [the] each input image
data represents [an] image data from a front side or a back side of a document;
document size information indicating a size of [the] each input image
data;
scaling factor information indicating a scaling factor when [the] each
input image data is scaled up or down;
read image number information indicating how many image data are
inputted through said image data input means to form the image data [of] contained
on one page;
input request information indicating whether a request for transmitting
each input image data has been given to said information processing means; and
input completion information indicating whether [the] each input image
data is completely inputted through said image data input means.

9. (Amended) The image processing device as set forth in claim 7,
wherein said image process table includes at least one item of
information selected from the group consisting of:
image ID information indicating an identification number for identifying
each page [of the inputted] containing each input image data;
process information indicating the contents of processing to be
performed to [the] each input image data contained on each page;
process ID information indicating a location in a second image data
storage means where processed [image] data of each input image data is stored; and
process completion information indicating whether the image processing
with respect to [the] each input image data is completed.

10. (Amended) The image processing device as set forth in claim 7,
wherein said image output table includes at least one item of information
selected from the group consisting of:
output image ID information indicating an identification number for
identifying each page of processed image data] containing each processed input image
data;
sheet side information indicating whether [the] each input image data is
to be recorded on a front side or a back side of a sheet;
print size information indicating the size of a sheet on which [the] each
input image data is to be recorded;
print number information indicating a number of each input image data
to be outputted;
output request information indicating whether [the] each processed input
image data is requested by said image output means;
output completion information indicating whether [the] each processed
input image data has been outputted as instructed;

memory release information indicating whether clearance of [the] each processed input image data from said second image data storage means is permitted; and

output ID information indicating a location in said second image data storage where a final version of each processed input image data to be outputted is stored.

11. (Amended) The image processing device as set forth in claim 1,
wherein [the] each input image data is image data of a document [image] suitable for reading; and

said image data input means is document image reading means for reading [the] a document image.

12. (Amended) The image processing means as set forth in claim 1,
wherein [the] each input image data is image data for use in a computer, and

said image data input means is interface means for receiving data from a computer.

13. (Amended) The image processing device as set forth in claim 1,
wherein [the] each input image data is image data for use in a facsimile machine, and

said image data input means is facsimile interface means for receiving data from a facsimile machine.

14. (Twice Amended) An image processing device, comprising:
first image data storage means for storing [first] each image data to be inputted;
image processing means for carrying out image processing with respect to [the first] each inputted image data;
second image data storage means for storing [second] each processed input image data obtained by performing image processing with respect to said [first] each input image data by said image processing means; and
management table means for managing input request information indicative of a request for transmitting [the first] each processed input image data from said image processing means, and input completion information indicative of the completion of an input of said [first] each input image data in connection with the corresponding [first] each input image data stored in said first image data storage means, and for managing processing completion information indicative of the completion of image processing with respect to said [first] each input image data by said image processing means [,] in connection with the corresponding [second] each processed input image data stored in said second image data storage means.

15. (Twice Amended) The image processing device as set forth in Claim 14, comprising:

image output means for outputting [the] each processed input image data from said second image data storing means,

wherein said management table means further manages output request information indicative of a request for outputting the [second] each processed input image data from said image output means, and output completion information indicative of the completion of an output of [said second] each processed input image data [,] in connection with the corresponding second] each processed input image data stored in said second image data storage means.

16. (Amended) The image processing device as set forth in claim 1, further comprising second image data storing means for storing [the] each input image data processed by said image processing means,

wherein said management table means further includes a post image processing data management section for managing each processed input image data stored in said second image data storage means in connection with the corresponding management information.

17. (Amended) The image processing device as set forth in claim 1, further comprising:

second image data storage means for storing [the] each processed input image data processed by said image processing means; and

image output means for outputting [the] each processed input image data from the second image data storage means,

wherein:

said management table means manages the output request information indicative of a request for outputting [the] each processed input image data from the image output means, and output completion information indicative of the completion of an output of [the] each processed input image data [,] in connection with the corresponding each processed input image data stored in said second image data storing means.